

REMARKS

Claims 1-18 were previously pending in the present application. Claim 1 is hereby amended. Claims 1-18 remain pending as amended.

Specification

The specification was objected to because the issues raised in paragraphs 1-3 of the above-referenced Office action. These issues are addressed by the specification amendments above such that the objections to the specification are now believed to be overcome.

Claims

Claims 1, 5-7, 9, 10, 17 and 18 were rejected under § 102(a)/(e) as being anticipated by Castellote published application (U.S. App. Pub. No. 2003/0233704). Claims 1-11, 17 and 18 were rejected under § 103(a) as being obvious in light of Castellote. Claim 12 was rejected as being obvious in light of Castellote and the Carrier patent (U.S. Pat. No. 4,249,522). Claims 13-16 were rejected as being obvious in light of Castellote and the Nicollet patent (U.S. Pat. No. 3,964,472).

In response, claim 1 (and thus all of the claims) are hereby amended to require that each row is spaced vertically from the basin bottom at a different height than the other of the plurality of rows so that the plurality of air jets in each of the plurality of rows are spaced apart vertically and the plurality of air jets in a higher one of the plurality of rows realizes less pressure from the water in the basin than the plurality of air jets in a lower one of the plurality of rows.

This language is supported for example by paragraph 29 of the specification, and thus does not introduce new matter.

The claims thus recite an air bath in which vertically spaced rows of air jets extend essentially around the perimeter of the basin side walls. The benefits and structural for achieving these benefits are described in paragraph 29 of the specification, which is reproduced below for convenience.

The vertical spacing of the rows 40A-40C provides an important aspect of the invention. The pressure head created by the water in the basin will be different for air jets at different depths, namely the pressure head being lesser for the higher air jets. Thus, as is possible in prior art systems, some of the air jets may become effectively blocked by the pressure head, particularly those air jets farthest from the air supply. Unlike prior art systems, however, should this happen in the system of the present invention, air can still flow from air jets in one or more of the higher rows because of the decreased pressure head. Moreover, because the rows of air jets in the present invention extend along the entire perimeter of the side walls, full body treatment can be achieved and maintained without unintended "dead spots" in the water where little or no air flow occurs because the air jets become effectively blocked. This benefit also allows the bather to select more or less agitation without creating dead spots. Dead spots are more likely to occur when the air flow is decreased since less force is generated by the air. So, in conventional systems having adjustable flow control, a bather desiring a more subtle treatment could slow the air flow, however for example, when the desired bubbling at the head was achieved, the water may not be agitated significantly (if at all) at the bather's feet. This problem is avoided by the air jet arrangement of the present invention because in areas where air jets may become blocked by pressure head (such as areas most remote from the air supply) air jets in one or more of the upper rows will still be able to emit air because of the lower pressure head.

The air jet arrangement and the attendant benefits have not been realized by the prior art. In particular, neither Castellote or Carrier disclose rows of air jets that are spaced vertically along the side walls of the basin. Instead, a single row of air jets is provided (see FIG. 2 of Castellote and FIG. 5 of Carrier) or horizontally spaced rows of air jets are provided in the basin floor, as in FIG. 1 of Castellote.

The Nicollet reference shows in FIGS. 1 and 2 that a very limited section (backrest area) of the basin can have rows of vertically spaced air jets, however, these rows do not extend essentially around the perimeter as claimed. As such,

the benefits of ensuring full body air treatment cannot be obtained by the disclosed bath.

The cited patents do not provide a motivation for one to arrive at the claimed invention, absent impermissible hindsight and using the applicants' disclosure as a roadmap for piecing the combination of references together. At best the reference teach that various air jet patterns can be used. However, they do not provide the necessary suggestion regarding the benefits of vertically spaced air jets, particularly air jets arranged in rows about the entire perimeter of the basin, to motivate one to arrive at the claimed invention from the combined teaching of the cited art.

Accordingly, in light of the amendment and remarks made herein, the cited prior art is not believed to render obvious the present invention as now claimed.

Conclusion

Accordingly, claims 1-18 as now amended are believed to in allowable form in light of the above remarks. Allowance of these claims is thus respectfully requested.

No fees are believed necessary for consideration of this response. Nevertheless, should any additional fees be needed for full consideration of this amendment, please charge any fees believed necessary in connection with this response to Deposit Account 17-0055.

Respectfully submitted,

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